

WHAT IS CLAIMED IS:

1. An aluminum alloy-and-resin composite comprising:
a shaped aluminum alloy material that has been
subjected to a dipping process in which it is dipped in an
5 aqueous solution of at least one selected from the group
consisting of ammonia, hydrazine, and a water-soluble
amine compound; and

a thermoplastic resin composition integrally bonded
to a surface of said shaped aluminum alloy material, said
10 thermoplastic resin composition containing polyphenylene
sulfide as a component.

2. An aluminum alloy-and-resin composite comprising:
a shaped aluminum alloy material that has been
subjected to a dipping process in which after it has been
15 dipped in a basic aqueous solution and/or an acid aqueous
solution for pretreatment, said shaped aluminum alloy
material is dipped in an aqueous solution of at least one
selected from the group consisting of ammonia, hydrazine,
and a water-soluble amine compound; and

20 a thermoplastic resin composition integrally bonded
to a surface of said shaped aluminum alloy material, said
thermoplastic resin composition containing polyphenylene
sulfide as a component.

3. An aluminum alloy-and-resin composite according
25 to claim 1 or 2, wherein said thermoplastic resin
composition has a fibrous filler and/or a powder filler
added thereto to improve mechanical properties.

4. An aluminum alloy-and-resin composite according

to claim 3, wherein said fibrous filler is at least one selected from the group consisting of glass fiber, carbon fiber, and aramid fiber, and said powder filler is at least one selected from the group consisting of calcium carbonate, magnesium carbonate, silica, talc, glass, and clay.

5 5. A production method for an aluminum alloy-and-resin composite, comprising the steps of:

 dipping a shaped aluminum alloy material in an
10 aqueous solution of at least one selected from the group consisting of ammonia, hydrazine, and a water-soluble amine compound;

 inserting said shaped aluminum alloy material into a mold; and

15 integrating a thermoplastic resin composition containing polyphenylene sulfide to said shaped aluminum alloy material in said mold.

 6. A production method for an aluminum alloy-and-resin composite, comprising the steps of:

20 dipping a shaped aluminum alloy material in a basic aqueous solution and/or an acid aqueous solution for pretreatment;

 dipping said shaped aluminum alloy material after said pretreatment in an aqueous solution of at least one
25 selected from the group consisting of ammonia, hydrazine, and a water-soluble amine compound;

 inserting said shaped aluminum alloy material into a mold; and

integrating a thermoplastic resin composition containing polyphenylene sulfide to said shaped aluminum alloy material in said mold.

- 5 7. A production method for an aluminum alloy-and-resin composite according to claim 5 or 6, wherein said thermoplastic resin composition is integrated to said shaped aluminum alloy material in said mold by injection molding, heat pressing, or co-extrusion.